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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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1 RECORD OF ORAL HEARING  
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3 UNITED STATES PATENT AND TRADEMARK OFFICE  
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5  
6 BEFORE THE BOARD OF PATENT APPEALS  
7 AND INTERFERENCES  
8

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10 *Ex parte* KOICHI HAGIWARA and JIRO WATANABE  
11

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13 Appeal 2008-002132  
14 Application 10/006,568  
15 Technology Center 3700  
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17  
18 Oral Hearing Held: August 4, 2009  
19  
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21  
22 Before JENNIFER BAHR, STEVEN McCARTHY, and FRED A.  
23 SILVERBERG, *Administrative Patent Judges*  
24

25 ON BEHALF OF THE APPELLANT:  
26

27 BLAKE TANKERSLEY, ESQUIRE  
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29 2100 Pennsylvania Ave, N.W.  
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31  
32

33 The above-entitled matter came on for hearing on Tuesday, August 4, 2009,  
34 commencing at 9:06 a.m., at the U.S. Patent and Trademark Office, 600  
35 Dulany Street, Alexandria, Virginia, before Kenyan C. Hopchas, Notary  
36 Public.

PROCEEDINGS

JUDGE BAHR: Good morning; you can get started whenever you are ready.

MR. TANKERSLEY: Hello, my name is Blake Tankersley, my Registration Number is 59,238, and I am here to present the Oral Hearing for Application Number 10/006,568.

I would like to thank the Board for allowing me to present this oral hearing. First I am going to explain the claimed invention, and then, I am going to explain the Examiner's rejections, and where the claims overcome the claimed invention.

The claimed invention generally relates to a device for spraying a jet flow onto an object to be cleaned. Figure 1 of the present application shows an embodiment of the claimed invention.

As we can see in figure 1, an injection to nozzle 2 is provided, which mixes a pressurized liquid and a pressurized gas, inside injection nozzle, and injects the pressurized liquid and the pressurized gas.

Also the bigger one shows an operating means 19, for stopping the pressurized liquid to said injection nozzle 2, and the detecting means, 20, for detecting a supply and stop of the pressurized liquid.

Switching valve 5 is provided to supply and stop the pressurized gas to said injection nozzle 2, and the controller 13 controls a switching operation of the switching valve 5, based on a detection signal transmitted from the detection means 20.

1           That is, the controller 13 opens the switching valve 5, supplying the  
2   pressurized gas to the injection nozzle tube, when the detecting means 20  
3   detects the injection of the pressurized liquid from the injection nozzle 2.

4           And the controller 12 closes the switching valve 5 to stop the supply  
5   of the pressurized gas to the injection nozzle tube when the detecting means  
6   20 detects the stop of the injection of the pressurized liquid from the  
7   injection nozzle 2.

8           One advantage of this structure is that by having controller 12 control  
9   the switching valve 5 based on the detection means 20, it is possible to mix  
10   and inject the pressurized liquid and the pressurized gas using only one  
11   operating means 19.

12          This reduces the size, weight and complexity of the nozzle because a  
13   separate operating means is not necessary in order to stop and supply the  
14   pressurized gas to the injection nozzle.

15          JUDGE McCARTHY: So if I understand correctly, counsel, the  
16   injection nozzle 2, the output from there is a mixture of a gas, a liquid and  
17   particulates of the supply 6?

18          MR. TANKERSLEY: In claim 1 it does not have the particulates,  
19   that is discussed in claims 7 and 15 but you are correct that it does inject a  
20   gas and a liquid.

21          JUDGE McCARTHY: And how does that distinguish over the prior  
22   art?

23          MR. TANKERSLEY: Well, it distinguishes over the prior art because  
24   it has a pressurized gas that is being provided to the nozzle at the same time  
25   that the pressurized liquid is being provided to the nozzle.

1           That is, that in the prior art the pressurized gas is only, from the tank,  
2 60, it is only provided when the jetting of the nozzle is interrupted, while in  
3 ours the pressurized gas is being provided while, during the jetting of the  
4 pressurized liquid.

5           JUDGE SILVERBERG: And the prior art cannot have or can it have  
6 the pressurized liquid and the pressurized gas at the same time?

7           MR. TANKERSLEY: This is not capable of doing that. The prior  
8 art, the way it works is it is directed to prevent a clogging at the nozzle, the  
9 nozzle 118. The nozzle --

10          JUDGE SILVERBERG: Woodward?

11          MR. TANKERSLEY: Yes, Woodward U.S. Patent Number  
12 52120402, Woodward. And looking at figure 3 of Woodward, you can see  
13 that during the jetting operation the high pressure water is jetted from the  
14 nozzle 118. This is shown by the arrows in the pipes 32, going through the  
15 barrel 116, and out of the end of 118, during this operation since the nozzle  
16 118 creates a high pressure flow inside the barrel 32.

17          This high pressure flow is sensed by the pressure actuator 12, which  
18 causes the three-way valve 14 to switch so that the particulates or the  
19 abrasive material 18 is allowed to go from the pipe 56 on down into the  
20 nozzle 118. This is during the jetting operations.

21          However, as shown in figure 1, when the jetting operation is  
22 interrupted the pressurized liquid goes through the nozzle dump 120 instead  
23 of the nozzle 118.

24          This causes a lower pressure flow to occur, which is detected by the  
25 pressure actuating switch 12, or the pressure actuator 12.

1           This causes 12 to switch the three-way valve 14, which opens up the  
2           passageway to allow the compressed air supplied in tank 61 to be ejected  
3           from the nozzle 118.

4           JUDGE SILVERBERG: In this condition, is the state of the valve, I  
5           guess it would be 110 or 112, such as to cut off all flow of the liquid into the  
6           nozzle 118?

7           MR. TANKERSLEY: It is shown in figure 4 that that is cutting off  
8           all flow of liquid to the nozzle 118, yes.

9           MR. McCARTHY: Is it the air conduit 50, in Woodward, figure 3  
10          you are referring to?

11          MR. TANKERSLEY: Right. This only allows just regular  
12          atmospheric air to go through. This is caused by a vacuum that is created by  
13          the water going through the nozzle 118; it travels up to the air conduit 50.

14          It is not pressurized air, it is only atmospheric air that is pulled in by  
15          the vacuum and created by the nozzle.

16          JUDGE McCARTHY: Could you point that out to us? Where in  
17          Woodward does it say that?

18          MR. TANKERSLEY: It says on column 5 that the valve 52 with  
19          lever 54 adjusts the air plume to enter into the air inlet 46.

20          So it only talks about just permitting the air, it doesn't say anything  
21          about pressurized air being put into the conduit 50.

22          I do not think that it actually describes how the air is entered through  
23          the conduit 50, but it is my understanding that it is a vacuum that causes that  
24          reaction since it does not disclose any pressurized area to allow air to go  
25          through conduit 50.

1           The Examiner seems to acknowledge in his Answer that Woodward  
2 does not explicitly disclose mixing a pressurized liquid and a pressurized  
3 gas.

4           The Examiner thus states that the mixing of the pressurized liquid and  
5 the pressurized gas is functional language in the claim, and that the device in  
6 Woodward only has to be capable of performing this function.

7           In order to show that this is capable the Examiner alleges that if the  
8 pump in Woodward, shown by 36 were to malfunction, the resulting  
9 pressure could allow the liquid to flow to the nozzle 188, while the  
10 pressurized gas flows through the nozzle 188.

11           However, an anticipation rejection based on the Examiner's  
12 modification of the device Woodward, specifically, for a reference to  
13 anticipate a claim a reference must expressly or inherently describe every  
14 element of the claim.

15           However, Woodward never expressly or inherently describes the  
16 pump malfunctions in such a way so that the liquid would flow to the nozzle  
17 188, while at the same time the pressurized gas flows through the nozzle.

18           Accordingly, the Examiner is modifying the device in Woodward in  
19 his rejection, which is an improper speculation that has no basis in the law  
20 under Section 102.

21           This is, there is simply no legal basis for such a modification.

22           JUDGE McCARTHY: Correct me if I am mistaken, but the Examiner  
23 refers to pump malfunctioning a pressure of about 1,000 psi, and it would  
24 become less and then somehow the nozzle, well, he also addresses the  
25 residual moisture in the --

1 MR. TANKERSLEY: That is a separate point. Let me get to the --

2 JUDGE McCARTHY: The nozzle, the pressure be less than 1,000,  
3 can you address why there would not be, or would there be any mixing with  
4 the high pressure gas at that point?

5 MR. TANKERSLEY: Woodward does disclose that there can be a  
6 malfunction, a mechanical malfunction, and this is shown in column 7, line  
7 49 through 51.

8 It says "The water jetting operations may become interrupted due to  
9 an arbitrary choice by the operator, or by some unforeseen mechanical  
10 failure."

11 Woodward does not disclose what this mechanical failure is, it could  
12 be that the pump just completely shuts off.

13 In order for an anticipation rejection to be upheld, Woodward has to  
14 disclose every element of the claim, therefore, it has to also, and the  
15 mechanical failure is not inherent that the mechanical failure is going to be  
16 mechanical failure that the Examiner mentions.

17 Therefore, it is not inherent, nor expressly disclosed in Woodward that  
18 the pump has a mechanical malfunction that would allow it to have this  
19 reduced pressure that the Examiner alleges.

20 Basically, this would be a modification of Woodward, which again, as  
21 I said before, that is not proper in a 102 rejection.

22 Also, to your other point, the Examiner in the non final section that  
23 was done, the last one before the appeal was brought did say that an  
24 alternative rationale for why Woodward would allegedly anticipate claim 1.



1           Now, he alleged specifically that Woodward discloses that there can  
2   be some residual moisture at the nozzle 118 when the pressurized gas is  
3   injected into the nozzle 118.

4           However, claim 1 recites that it is a pressurized liquid that is injected  
5   from the nozzle 118.

6           Residual water would not have any pressure to it, it is just residual.  
7   Therefore, the alternative rationale is also, is not --

8           JUDGE SILVERBERG: Counsel, wouldn't the gas at that point have  
9   to be pressurized at least in the sense of having a higher pressure than  
10   atmospheric in order to move out of the tube?

11          MR. TANKERSLEY: Yes.

12          JUDGE SILVERBERG: And then, wouldn't the liquid also be  
13   pressurized in the sense that it is going to be subject to the same pressure  
14   that the gas is entering?

15          MR. TANKERSLEY: I would like to reserve answering that question  
16   until I have a little more chance to think about that.

17          JUDGE McCARTHY: Well, let's just go on to your next point, then.

18          MR. TANKERSLEY: Also, moving on to another rejection. The  
19   Examiner rejects claims 7 and 15 under 35 U.S.C., Section 112, second  
20   paragraph, as allegedly being indefinite.

21          Specifically, the Examiner is citing, granular material is controlled by  
22   said controller based on the supply and stop of pressurized liquid detected by  
23   said sensor.

1           Specifically, the Examiner states that the specification discloses  
2 controller 13 which controls driving motor 11 and a feeding device 7, to  
3 control and supply the stop of granular material.

4           The Examiner thus goes on to allege that there is a structural gaping  
5 claim in 7 and 15. And that claims 7 and 15 should recite either the driver  
6 motor or the feeding device.

7           Additionally, the Examiner cites to MPEP 2114, for the proposition  
8 that claims directed to an apparatus must be distinguished from the prior art  
9 in terms of structure, rather than function.

10          However, again, the Examiner's rejections have no basis in the law.

11          JUDGE McCARTHY: Now, counsel, if claim 7 were to be issued in  
12 its current form, would a conventional infringer infringe by constructing one  
13 of these devices or would infringement have to wait until it was actually  
14 operated in such a manner that the controller controlled the supply of and  
15 stop of powder or granular material?

16          MR. TANKERSLEY: It would have to be capable of controlling the  
17 powder and granular material.

18          This functional language saying that --

19          JUDGE McCARTHY: So you are saying that we should interpret  
20 claim 7 as being limited to a device with a controller, which is capable of  
21 supplying and stopping powder and granular material?

22          MR. TANKERSLEY: Correct.

23          JUDGE McCARTHY: All right.

24          MR. TANKERSLEY: There is no basis in the law for requiring what  
25 the Examiner requires for claims 7 and 15.

1 And as a preliminary matter --

2 JUDGE McCARTHY: And Counsel, if I may take you back to claim  
3 1 again, when it recites the pressurized liquid. That is, you are asking us to  
4 interpret that as liquid that is pressurized independently of the gas?

5 MR. TANKERSLEY: I --

6 JUDGE McCARTHY: And how should we interpret the phrase  
7 "pressurized liquid"?

8 MR. TANKERSLEY: The pressurized liquid has to be pressurized so  
9 that it is able to move through the nozzle.

10 So therefore, the pressurization is what allows the liquid to be jetted.

11 All right. As a preliminary matter with claim 15 and the indefinite  
12 rejection I would like to note that claim 15 does recite a drive motor, which  
13 the Examiner says is necessary.

14 Therefore, claim 15 recites all the limitations that the Examiner has  
15 required and that there is no reason to reject claim 15. Also it is only  
16 rejected under Section 112, second paragraph.

17 And therefore, claim 15 should be allowable.

18 Additionally, Section 112, second paragraph only has two  
19 requirements; that is the claims must set forth the subject matter in which the  
20 applicants regard as their invention, and two, must particularly point out and  
21 distinctly claim the invention so that the scope of the claim is clear to a  
22 hypothetical person possessing the ordinary level of skill in the pertinent art.

23 Claims 7 and 15 satisfy both requirements. Claims 7 and 15 merely  
24 state that the controller provides control, which is what applicants regard as  
25 their invention.

1           Also, a controller that provides control is clear, and a person in the  
2 ordinary skill in the art would understand the scope of the claim.

3           Further, 112, second paragraph does not require a claim to include all  
4 features of a particular embodiment. Therefore, there is no support for the  
5 Examiner's allegation that a supposed structural gap would cause a claim to  
6 be indefinite.

7           Last, the Examiner's citation to MPEP 2114 is simply irrelevant.  
8 MPEP 1214 is directed to whether a claim is anticipated by a prior art, and  
9 has not bearing whether a claim is an indefinite, under Section 112, second  
10 paragraph.

11           Also, going back to claim 1. Claim 1 also recites, I am talking about  
12 the 102 rejection and using Woodward. Claim 1 also recites the detecting  
13 means for detecting a supply and stop of pressurized liquid generated by an  
14 operation of said operating means.

15           The Examiner alleges that the pressure actuator 12 in Woodward is  
16 the detecting means, and the high pressure pump 26, that is the operating  
17 means.

18           However, the pressure actuator 12 only detects when the high pressure  
19 fluid stream 33 has a pressure above or below 1,000 psi.

20           Specifically, when the high pressure stream 33 flows through a nozzle  
21 in 18 the high pressure fluid stream has a greater pressure than 1,000 psi.

22           On the other hand, when the high pressure fluid stream 33 flows  
23 through the nozzle dump 120, the high pressure fluid stream has a pressure  
24 less than 1,000 psi.

1           Accordingly, the pressure actuator 12 of Woodward merely detects  
2 the difference between the high and low pressure flow, therefore, the  
3 actuator at 12 would not be able to detect a difference between 36 stopping  
4 the pressurized liquid, and when there is no pressure flow going through.

5           Accordingly, Woodward does not disclose a detecting means for  
6 detecting supply and stop of the pressurized liquid generated by the  
7 operation of said operating means, as claimed in claim 1.

8           Similarly, claim 6 recites that pressurized gas is supplied to said  
9 injection nozzle. When said sensor detects the supply, it runs in liquid tank.

10          However, as stated before, Woodward only supplies pressurized gas  
11 when a high pressure fluid stream 33 has a pressure below 1,000 psi.

12          A fluid stream can have a pressure below 1,000 psi.

13          JUDGE SILVERBERG: Counsel, I take it that these arguments are in  
14 your Briefs?

15          MR. TANKERSLEY: In the Briefs it is our view that, no, no they are  
16 not in the Briefs.

17          JUDGE SILVERBERG: It might be helpful if you could help us out  
18 with the arguments that are in your Briefs.

19          MR. TANKERSLEY: All right. In the Briefs we say that --

20          JUDGE SILVERBERG: Unless they are fully set out there.

21          MR. TANKERSLEY: I think that the Briefs, the arguments in our  
22 Briefs are fairly fully set out.

23          Are there any questions?

24          JUDGE BAHR: Are there any other points that you would like to  
25 make?

1           MR. TANKERSLEY: Say what?

2           JUDGE BAHR: Any other points that you wanted to make?

3           MR. TANKERSLEY: I think I covered them all, let me know if you  
4 think I missed something.

5           JUDGE BAHR: We have no further questions.

6           MR. TANKERSLEY: All right. Thank you very much.

7

8           (Whereupon, at 9:28 a.m., the proceedings were concluded.)